## MEMORANDUM OF UNDERSTANDING

between the

## UNITED STATES FISH AND WILDLIFE SERVICE

and the

# MONTANA FISH, WILDLIFE AND PARKS

AUGUST 28, 1997

This agreement is made and entered into between the United States Department of Interior Fish and Wildlife Service, hereinafter referred to as the USFWS, and Montana Fish, Wildlife and Parks, hereinafter referred to as the MFWP.

Nothing in this agreement shall be deemed as enlarging or diminishing the jurisdiction or authority of the USFWS or MFWP within or adjacent to the Charles M. Russell National Wildlife Refuge (CMR).

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#### WITNESSETH

Whereas, the Charles M. Russell National Wildlife Refuge (CMR), a unit of the National Wildlife Refuge System (NWRS), is managed subject to direction of the 1966 National Wildlife Refuge System Administration Act, and

Whereas, the wildlife, which is part of the CMR, is also managed and protected in part by the State of Montana at least since 1925, and

Whereas, the public lands within the CMR and the wildlife within the CMR have been protected and managed by the USFWS since 1936, and

Whereas, the CMR is an integral part of the Missouri Breaks Short Grass Prairie Ecosystem and has substantially contributed to wildlife restoration, recreation and conservation, and

Whereas, the needs of wildlife within the CMR extend beyond the Refuge boundaries,

Now therefore, this Memorandum of Understanding is entered into for the purpose of addressing the mutual interest of the USFWS and the MFWP in managing the fish and wildlife resources and their habitat in and near the CMR.

## **AGREEMENTS**

The USFWS and MFWP agree that coordinated and scheduled collection and exchange of information will enhance the management of fish and wildlife resources and habitats on the CMR.

The USFWS and MFWP agree to provide each other with a forum for discussion of issues of mutual concern, particularly in advance of adopting new management prescriptions or public use objectives.

The USFWS and MFWP agree to limit discussions of hunting and harvest management strategies to those necessary to achieve the objectives for those populations of elk, mule deer, white-tailed deer, antelope, mountain lions, and bighorn sheep which use the CMR at least part of the year.

The USFWS and MFWP agree to discuss agency programs that affect habitat enhancement and management for wildlife on the CMR.

The USFWS and MFWP agree to gather and share big game and predator survey data collected on and adjacent to the CMR.

The USFWS and MFWP agree that there will be shared responsibility for unusual impacts of elk, mule deer, white-tailed deer, antelope, mountain lions and bighorn sheep to private property within and adjacent to the CMR. The USFWS and MFWP agree to jointly consider solutions to wildlife damage to private land associated with CMR big game populations within the applicable legal and policy constraints of each agency.

The USFWS and MFWP will mutually develop a cooperative process to resolve management issues related to fish and wildlife resources on the CMR, as described below in:

- 1. Attachment A population objectives.
- 2. Attachment B harvest management objectives.
- 3. Attachment C habitat management enhancement objectives.

The USFWS and MFWP agree to continue to coordinate enforcement, research and other efforts where appropriate.

This agreement will continue indefinitely or until terminated by either party after giving 30 days prior notice.

#### EXECUTION

To express the parties' intent to be bound by the terms of this agreement, they have affixed their signatures and executed this document on the date(s) set out below:

UNITED STATES FISH AND WILDLIFE SERVICE

MIKE HEDRICK DATE	1 I
CMR National Wildlife Refuge	Manager
MONTANA FISH, WILDLIFE AND PA	RKS
,	
MIKE ADERHOLD DATE	
Region 4 Supervisor	
TOM HINZ DATE	1
Region 6 Supervisor	
DON HYYPPA	DATE
Region 7 Supervisor	

## ATTACHMENT A

# THE COOPERATIVE PROCESS FOR DISCUSSING POPULATION OBJECTIVES AND MANAGEMENT

- A. USFWS and MFWP will meet at least annually to review big game population objectives.
- B. Joint discussion between agencies will be scheduled well in advance of the public involvement required to adjust hunting seasons and management prescriptions.
- C. At the meeting to review population objectives, the agencies will update big game population information and append as necessary to keep current.

#### ATTACHMENT B

# THE COOPERATIVE PROCESS FOR CHANGING HARVEST RECOMMENDATIONS

#### FOR BIG GAME USING THE CMR

The two agencies will use a consultation process built on three levels of decision making

Level I -- Field personnel from USFWS and N,4FWP will meet to develop mutually agreeable harvest recommendations. Recommendations will be passed to the affected -'MFWP regions for review and incorporation into regional recommendations for consideration by the FWP Commission. (MFWP regional supervisors agree to inform USFWS of any proposed changes in advance of the regional recommendation being transmitted to the FWP Commission.) In the absence of recommendations decision making will move to the next level.

Level II -- The deputy refuge manager, regional wildlife program managers and warden captains in the affected MFWP regions will develop recommendations and forward them to the affected MFWP regional supervisors and to the CMR refuge manager. If mutually acceptable recommendations are not developed, the decision making will move to the next level.

Level III --- CMR manager and affected MFWP regional supervisor(s) will discuss the issue and attempt to arrive at a mutually agreeable recommendation to pass along to the FWP Commission. If agreement is not reached, a statement will be generated by the group describing the issue and why reconciliation of differences could not be reached.

It is agreed that MFWP will usually represent both agencies in supporting harvest recommendations in discussions with the FWP Commission. The USFWS agrees to appear to provide supporting information requested by the Commission or by MFWP.

Time line for developing harvest recommendations:

Step 1 -- Tentative hunting season recommendations are generated in the Regions.

Level I consultation needs to occur in advance of the tentatives going from the regions to the FWP Commission.

Step 2 -- Tentatives go to the public from FWP Commission. As comments take shape from the public, Level I consultation will be continued before <u>final</u>

recommendations are generated by the regions.

Step 3 -- Final recommendations are considered by FWP Commission. MFWP will inform USFWS of Commission's final decisions.

Responsibility for initiation of communication with USFWS rests with MFWP through Regions 4, 6 and/or 7 field personnel and/or regional wildlife program managers.

## ATTACHMENT C

# COOPERATIVE PROCESS FOR DISCUSSING HABITAT ENHANCEMENT OBJECTIVES.

#### Relative to:

- 1) Wildfire/prescribed burn decisions
- 2) Fee title and conservation easement purchases
- 3) Watershed projects on or affecting CMR
- 4) Cropland management/conversion projects
- 5) Range (habitat) condition monitoring

USFWS and MFWP acknowledge that work in all these areas is ongoing. USFWS and MFWP jointly agree to keep lines of communication open at all levels and commit to meet at least once per year (in combination with other consultations) to share ongoing activities and ideas. Communication will be initiated early enough so that discussions may affect the outcome of the decisions.

## **APPENDIX**

Note: The appendix is simply a summary of the current management objectives and present survey programs of each management entity (CMR, R4, R6 and R7) involved in this agreement.

The partners recognize the different objectives. This section should be reviewed annually. Future review of this document will refine this information. The partners agree that their mutual goal is to produce a more comprehensive and compatible management and survey effort.

## I. C. M. RUSSELL REFUGE (USFWS)

### CMR BIG GAME OBJECTIVES

SPECIES	OBJECTIVES	SOURCE		
			TS	CONSTRAIN
Pronghorn	1,500 (pop)	1	Post S	Season
Elk	3, 000 (2.5/sq. Mile)		2	Mid-Winter
	28 mature males/100 females (min,	)	3	Post Season
Mule Deer	10 deer/sq. Mile or suitable habitat		2	Mid-Winter
	20 mature males 1100 females (min)		3	Post Season
Bighorn Sheep	160 min pop (HD622) (Actual Count)	3	Mid-Winter	
	7. 5 -average age of harvested male	es .	3	
	Reintroduce into all suitable habitat		3	

#### RECREATION OBJECTIVES

Hunting: Provide quality recreational opportunities associated with wildlife a populations consistent with refuge wildlife objectives. (4)

"In general, hunting on refuges should be superior to that available on other public or private lands and should provide participants with reasonable harvest opportunities, uncrowded conditions, fewer conflicts between hunters, relatively undisturbed wildlife, and limited interference from or dependence on mechanized aspects of the sport." (4)

### (1) Executive Order 7509

- *(2)*
- Final CMR Environmental Impact Statement Government Performance and Results Act Objectives National Wildlife Refuge System Manual (3)
- (4)

#### CMR CURRENT SURVEYS

## Height Density Pole Readings

CMR staff conduct height density Modified Robel Readings on selected habitat units. A Habitat Monitoring Plan guides this effort which was developed as part of the CMR Management Plan Record of Decision. Habitat readings are completed following the growing and grazing season. Measurements are taken of residual vegetation on a 100 foot transect. Two comparative sites (grazed and ungrazed) are monitored. A summary of residual cover conditions on a portion of the 62 habitat units could be provided by January 15 of each year.

## Riparian Monitoring

Baseline riparian inventories were initiated in 1995. The methodology evaluates stream incisement, rock content, bank stability, livestock accessibility, erosion potential, soil depth, bare ground, vegetative root mass, vegetative canopy cover, plant species, vegetation utilization and woody species establishment and regeneration. A rating parameter is developed which determines if the stream is functioning (healthy), functioning at risk (healthy, but at risk) or non-functioning (unhealthy). One hundred thirteen stream segments have been evaluated on 73 drainages on CMR. Current riparian health will be evaluated whenever a change in habitat management is proposed.

Baseline inventories are available. Proposed habitat management changes will be coordinated with MFWP prior to finalization.

## Sage Grouse and Sharp-tailed Grouse Surveys

Sage grouse and sharp-tailed grouse are surveyed utilizing listening stations and lek counts. Over 350 listening stations have been established and attempt is made to sample each one twice each spring. Listening station data yields trend information, and, more importantly, a picture of habitat occupancy and distribution. Surveys are conducted in April and Inlay of each year. Data is available by June 15. Lek counts are done incidental to listening route surveys and this data is also available.

## Mule Deer Trend Surveys

Mule deer trend surveys have been conducted in Skunk Coulee, Sand Arroyo, Bobcat Creek, Harpers and Nelson Creek. Buck (adult, yearling and immature), doe and fawn numbers are recorded. Surveys are conducted over established routes utilizing fixed wing aircraft. Survey methods and time periods will be standardized to meet the needs of the agreement.

## Big Horn Sheep Survey

Bighorn sheep surveys were conducted in the Mickey/Brandon/Larb Hills area up through 1993. Surveys were done in December using a Super Cub, helicopter

or truck. Number of rams 2/4+, total rams, lambs and ewes were recorded. A coordinated effort will eliminate duplication.

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## II. REGION 4 (MFWP)

#### R4 BIG GAME OBJECTIVES

The CMR Refuge comprises 16% of the area of HD 410 and 2 % of the area of HD 417.

These percentages closely match the percentages of elk and deer that are harvested on the

refuge portions of these hunting districts.

#### *Elk -- HD's 410 and 417:*

- Provide an average of 7, 5 00 days of elk hunting.
- Annually harvest between 125-175 antlered and 225-325 antlerless elk.

### Deer - HD's 410 and 417:

- Provide an average of 7, 000 days of deer hunting.
- Annually harvest 900 mule deer (30-50% females) and 125 white-tailed deer (30-50% females).

Antelope - HD's 480 and 481: No antelope habitat, or antelope, occur oil the CMR Refuge

in R-4.

#### Mountain Lion - HD's 410 and 417:

- Plan is to establish a lion quota for the prairie/breaks portion of an existing lion area in eastern R-4. The proposal is a quota of 3 lions valid in deer/elk HD's 410, 417, 419 and 426. The CMR Refuge would comprise about 20% of the better lion hunting area in these HD's.

#### Bighorn Sheep - HD 482:

The best sheep habitat in this HD occurs west of the CMR boundary. L very few sheep wander to the Refuge. Two adult ewe permits are valid east of the Power Plant Ferry Road. Currently sheep permits issued are valid on the Refuge south of the Missouri River and west of Highway 191.

#### R-4 CURRENT SURVEYS

#### Elk - HD 410:

- Annually, winter aerial survey of Sand Creek/Carroll Coulee for trend and ratios. The CMR Refuge is about 50% of this study area.
- Biennially conduct aerial survey of HD for total numbers, ratios and trend. CMR Refuge is about 16% of this survey. HD 417:
- Biennially, conduct aerial survey of HD for total numbers, radios and

trend. CMR Refuge is about 10% of this survey.

#### Deer - HD 410:

- Annually, post-season aerial survey of Sand Creek/Carroll Coulee for population trend and ratios. CMR Refuge is about 50% of this survey.
- Annually, aerial spring recruitment survey of Sand Creek for doe: fawn ratios/recruitment.

## Bighorn Sheep - HD 482:

- Annually, spring or summer aerial survey of HD 482 for population trend and ratios. CMR Refuge portion of HD 482 is apart of the survey.

#### Furbearers and Rabbits:

- Annual winter tracks/trend surveys are conducted along Sand Creek, Wilder, Skyline and Musselshell Trails.

## Sharp-tailed Grouse

- Annually, in Sand Creek/Carroll Coulee, spring lek surveys are conducted for population trends.

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## III. REGION 6 (MFWP)

## R-6 BIG GAME OBJECTIVES

Elk - Within the Missouri Break Elk Management Unit harvest objectives for elk include:

- Annually providing 13, 000 hunter days of elk hunting and a harvest of 225-300 antlered and 250-350 antlerless elk. The R-6 river breaks habitat (HD's 621, 622, 623, 631, 632) compliment of these objectives is at least 40% of the total. Approximately 65% of the elk harvest occurs on the CMR.

Deer - Parts of six R-6 hunting districts (621, 622, 623, 631, 632, 650) occur in the sagebrush grassland and Missouri River breaks habitat of the CMR.

- In 1995 these hunting districts provided about 18, 000 hunter days of recreation and harvests of about 2,100 mule deer and 800 white-tailed deer. Of these totals the CMR contributed approximately 350 mule deer and 100 white-tailed deer, and 3,600 hunter days of recreation in 1995.
- Mature bucks represented 50% of the mule deer and 67% of the white-tailed bucks harvested.

Antelope - Long-term department objectives for antelope in both the sagebrush grassland (HD's 620, 630) and grassland/cropland (HD 650) habitat types of R-6 attempt to provide a sustained harvest of 3,800 antelope, 4,700 hunters afield,

70% hunter success and 11,750 hunter days. The CMR percent of the harvest is about 3%.

Bighorn Sheep - Population will be managed at a level consistent with the available habitat. Ram populations are represented by individuals of every age class. Most rams harvested by hunters will be at least 3/4 curl.

Either-sex license quotas are based on the number of 314 curl rams in the population and the annual recruitment of younger rams into mature ram age classes. Adult ewe license quotas are based on the number of adult ewes in the population and the recruitment of young ewes into adult ewe age classes. Although some sheep are located off the CMR in HD 622, typically all of the harvest occurs on the Refuge.

## R-6 CURRENT SURVEYS

Elk - Aerial surveys are conducted annually during winter or early spring to obtain population and distribution information. Full coverage surveys are flown at least every 2 years in each hunting district using a helicopter or fixed-wing aircraft to obtain an estimate of the total population size and trend. Partial coverage aerial surveys are conducted during other years to classify a representative portion of the elk population to determine calf production and sex ratio of adults.

 Harvest data are collected at the Havre check station, through the FWP big game harvest survey, and during hunter checks afield.

Deer - The region 6 deer data gathering effort includes: trend area surveys, big game harvest survey, and hunter checks afield and at the Havre check station. Additional information comes from incident observations made by FWP field personnel, game damage complaints, and comments made by landowners and hunters.

- Fourteen mule deer and 8 white-tailed deer trend areas located across the spectrum of habitats in Region 6. Information obtained includes total number of adults and number of fawns. For mule deer, data is also collected on numbers of bucks and does. Four of the mule deer trend areas surveyed occur either in total or In part on the CMR. Mule deer are also counted on the CMR during elk surveys.

Antelope - R-6 estimates total population for an entire habitat type. Nine of 19 survey areas are located in the sagebrush/grassland and grassland/cropland habitat types. These survey areas are chosen by analyzing information from periodic total surveys.

- Information gathered includes sex, age and distribution. Density, population estimates, production, recruitment and age and sex composition results from analysis of that information.

Bighorn Sheep will be done annually. Data on distribution, habitat use, movements and food habits are collected whenever possible.

- Bighorn sheep harvest data is collected directly from hunters who need to check their rams with an FWP warden or biologist and from the telephone harvest summary. Data collected includes kill site, number and location of sheep observed, days hunted, age of sheep and various horn measurements.

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## IV. REGION 7 (MFWP)

## R-7 BIG GAME OBJECTIVES

Elk - Within the Missouri River Break Elk Management Unit harvest objectives for elk management include:

- Annually provide 13, 000 days of elk hunting and a harvest of 225-300 antlered and 250-350 antlerless elk.
- Region 7's sagebrush grassland river breaks habitat unit (HD 700) compliment of these objectives is at least 10-15 % of the total.
- Currently an average of 80% of the elk harvest occurs on the CMR.

Deer - Quantitative, long-term objectives for deer management in Region 7's sagebrush/grassland -river breaks habitat unit (HD 700) include:

- Annually, to provide a long-term average 27,000 days of deer hunting and a harvest of 4,200 mule deer and 1,000 white-tailed deer.
- Maintain an average hunter success rate of 70% with an average of 5 days hunter effort per harvested deer. Harvest will be composed of 50:50 buck: doe ratio. These harvest objectives will be met while simultaneously maintaining healthy, productive and stable deer populations.

Antelope - Quantitative long-term objectives for antelope management in Region 7's sage brush/grassland - river breaks habitat unit (HD 700) include:

- Annually, to provide 15,000 days of antelope hunting and a harvest of 5,000 antelope with an antelope hunter success rate of 111 % with an average of 3 days hunter effort per harvested antelope.
- The C.M. has very little antelope habitat and harvest is insignificant.

Mountain Lions - Harvest objectives for mountain lions include an annual, region wide quota of 7 lions. - The potential exists for 1/4 - 1/3 of this harvest to come from HD 700.

### R-7 CURRENT SURVEYS

Elk - Two elk trend areas are flown annually, in mid-August. Information gathered on these flights include elk distribution, age and sex, production, recruitment and

## composition.

Deer - Management on a year-round basis follows this scheme:

- Beginning in the fall, production surveys are undertaken.
  - October-November deer check stations are run.
  - December-January post season population composition surveys are run.
  - January March hunter/harvest surveys are undertaken.
  - March-April post season (post winter) population surveys are run.
  - June final license sales, hunter/harvest survey information is evaluated.
  - July-September this report is written detailing the results and annual evaluation of Region 7's Planned System of Deer Management.

Antelope - Management on a year-round basis follows this scheme:

- Beginning in July production and recruitment surveys are undertaken.
- In August, harvest quotas are established.
- September, initial license sale information is evaluated.
- October-November, antelope check stations are run.
- January March, hunter/harvest surveys are undertaken.
- March April, post winter population surveys are run.
- June, final license sales, hunter/harvest surveys are run.
- June-September, this report is written detailing the results and annual evaluation of
  - Region 7's Planned System of Antelope Management.